

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10634-002001	Application No. 09/560,236
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))		Applicant Shutsung Liao et al.	
		Filing Date April 28, 2000	Group Art Unit 1616

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,508,453	04/16/1996	Arosio et al.	552	553	
	AB						
	AC						

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AD							
	AE							

**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	AF	Runong Wang et al., "Chemical Product Manual", the third version, Pharmaceuticals, Chemical Industry Publishing House, pp. 740 (January 1999)
	AG	
	AH	
	AI	

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Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,424,463	6/13/1995	Lardy et al.	552	637	
	AB	4,304,726	12/8/1981	Arakawa et al.	260	397.2	
	AC	4,193,930	3/18/1980	Chorvat	260	397.2	
	AD	4,125,544	11/14/1978	Dygos	260	397.4	
	AE						
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	AH						
	AI						
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	AL						
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	AN						
	AO						
	AP						

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	AQ	Database HPCAPLUS, AN 1974:461503, Bleau, G. et al. Cholesterol Sulfate, Occurrence and possible biological function as an amphipathic lipid in the membrane of the human erythrocyte. Biochim. Biophys. Acta, January 1974. Vol. 352, No. 1, pp. 1-9.
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	AS	
	AT	

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<b>U.S. Patent Documents</b>							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	2,698,853	1/1955	Wildi	260	397.2	
	AB	5,562,910	10/1996	Daynes et al.	424	278.1	
	AC	6,369,247	9/2002	Miller et al.	552	542	
	AD						
	AE						

<b>Foreign Patent Documents or Published Foreign Patent Applications</b>							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation
							Yes No
	AF	123:286388	3/29/1995	China (Abstract Only)			
	AG						
	AH						

<b>Other Documents (include Author, Title, Date, and Place of Publication)</b>		
Examiner Initial	Desig. ID	Document
	AI	Bleau et al. "Cholesterol sulfate. I. Occurrence and possible biological function as an amphiphatic lipid in the membrane of the human erythrocyte." <i>Biochimica et Biophysica Acta</i> , Vol. 352(1), pp. 1-9, (1974)
	AJ	Dusza et al., "A Fusion Method for Preparation of Steroid Sulfates," <i>Steroids</i> p. 317-323 (1985).
	AK	Dusza et al., "The Preparation of Estradiol-17 $\beta$ Sulfates with Triethylamine-Sulfur Trioxide," <i>Steroids</i> p. 303-315 (1985).
	AL	Charles Freudenberg, et al., "Design of Inhibitors from the Three-Dimensional Structure of Alcohol Dehydrogenase, Chemical Synthesis and Enzymatic Properties", <i>J. Am. Chem. Soc.</i> , pp. 3344-3353, (1984)
	AM	Bethany A. Janowski, et al., "Structural requirements of ligands for the oxysterol liver X receptors LXRa and LXrb", <i>Proc. Natl. Acad. Sci., USA</i> , Vol. 96, pp. 266-271, (January 1999)
	AN	Kornel et al., "Studies on Steroid Conjugates: II Chemical Synthesis and Characterization of Sodium Cortisol-21-Sulfate and Sodium Tetrahydrocortisol-3, 21-Disulfate," <i>Steroids</i> . p. 67-75 (1964).
	AO	Nambara et al., "Preparation of Specific Antiserum to Estriol 3-Sulfate 16-Glucuronide," <i>Journal of Steroid Biochemistry</i> , 21: p. 199-203 (1984).
	AP	Tanaka et al., "Specific Antisera for the Radioimmunoassay of Estradiol-3-Sulfate," <i>Journal of Steroid Biochemistry</i> , 22: p. 285-288 (1985).
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Applicant(s)/Patent Under

Reexamination

LIAO ET AL.

Examiner

Barbara P. Badio, Ph.D.

Art Unit

1616

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-4,917,898	04-1990	Angelico et al.	424/452
	B	US-5,362,891	11-1994	Bonaldi et al.	552/554
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	X	

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(37 CFR §1.98(b))				

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Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AC	98/32444	07/30/1998	World Intellectual Property Organization				
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	AH	Mohammed N. Iqbal, et al., "Bile Acids. LXXXI. Synthesis and structural assignment of E/Z isomers of substituted methyl hydroxy-5β-cholest-24-en-26-oates", <u>Steroids</u> , Vol. 56, pp. 505-512 (October, 1991)
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	AJ	A. Kuritzkes, et al., "3-epi-Uzarigenin und 3-epi-17α-Uzarigenin", <u>Helvetica Chimica Acta</u> , Vol. 62, pp. 1502-1515 (1959)
	AK	Dieter Leibfritz, et al., "Nuclear Magnetic Resonance Spectroscopy. Carbon-13 Spectra of Cholic Acids and Hydrocarbons Included in Sodium Desoxycholate Solutions", <u>Journal of American Chemical Society</u> , Vol. 95, No. 14, pp. 4996-5003 (July 11, 1973)
	AL	S.H. Mujtaba Naqvi, "Chemical Synthesis and Mass Spectrometric Characterization of Some C-27 Steroids", <u>Steroids</u> , Vol. 22, pp. 285-290 (1973)
	AM	J. Polonia, et al., "Die Konstitution des Xysmalogenins", <u>Helvetica Chimica Acta</u> , Vol. 42, pp. 1437-1447 (1959)
	AN	C Tamm, et al., "Umwandlung von Cardenoliden durch Mikroorganismen. III. Umsetzung von Aglykonen und Glykosiden mit Fusarium lini", <u>Helvetica Chimica Acta</u> , Vol. 42, pp. 239-259 (1959)
	AO	R. Tschesche, et al., "Über pflanzliche Herzgifte, XIX. Mitteil., Die Glykoside der Uzara-Wurzel", <u>Chemische Berichte</u> , Vol. 85, pp. 1042-1053 (1952)
	AP	Stephen A. Ziller, Jr., et al., "Bile Acids. XXV. Allochenodeoxycholic Acid, A Metabolite of 5α-Cholestan-3β-OL in the Hyperthyroid Rat", <u>The Journal of Biological Chemistry</u> , Vol. 243, pp. 5280-5288 (1968)

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**U.S. PATENT DOCUMENTS**

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	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	P					
	Q					
	R					
	S					
	T					

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*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Cohen et al., "The preparation of bile acid amides and oxazolines. II. The synthesis of the amides and oxazolines of ursodeoxycholic acid, deoxycholic acid, hyodeoxycholic acid and cholic acid.", Steroids, vol. 40(6), December 1982, pages 701-711.
	V	
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b>Notice of References Cited</b>		Applicant/Patent Liao et al.	Application/Control No. <b>09/560,236</b>
		Examiner Barbara Radio	Art Unit <b>1616</b>
		Page 1 of 1	

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	Document Number Country Code-Number-Kind Code	Date MM-YYYY <sup>1</sup>	Name	Classification <sup>2</sup>	
A	5,583,239	12/1996	Regen	552	554
B	6,060,465	5/2000	Miljkovic et al.	514	169
C					
D					
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N	JP4169597	6/1992	JP	Noriyuki et al.	-	-
O	WO 94/02503	2/1994	WO	Contos	-	-
P						
Q						
R						
S						
T						

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U	Fini et al., J. Pharm. Sci., vol. 79(7), pages 603-605, 1990.
V	
W	
X	

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<sup>2</sup> Classifications may be U.S. or foreign.

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<b>U.S. Patent Documents</b>							
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,639,744	06/17/97	Marchi et al.	514	176	
	AB	5,466,815	11/14/95	Enhsen et al.	548	252	

<b>Foreign Patent Documents or Published Foreign Patent Applications</b>							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes      No
	AC						

<b>Other Documents (include Author, Title, Date, and Place of Publication)</b>		
Examiner Initial	Desig. ID	Document
	AD	Angelico et al., 'Dissolution of Human Cholesterol Gallstones in Bile Salt/Lecithin Mixtures: Effect of Bile Salt Hydrophobicity and Various pHs', Scandinavian Journal of Gasteroenterology 30:1178-1185, 1995.
	AE	Coleman et al., "Synthesis and Characterization of Novel Analogs of Conjugated Bile Acids Containing Reversed Amide Bonds", Journal of Lipid Research 36:901-910, 1995.
	AF	Janowski et al., "Structural Requirements of Ligands for the Oxysterol Liver X Receptors LXRx and LXRB", Proc. Natl. Acad. Sci. 96:266-271, 1999.
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	AI	Li et al., "Sterol Synthesis. Preparation and Characterization of Fluorinated and Deuterated Analogs of Oxygenated Derivatives of Cholesterol", Chemistry and Physics of Lipids 99:33-71, 1999.
	AJ	Roda et al., "Synthesis and Phisicochemical, Biological, and Pharmacological Properties of New Bile Acids Amidated with Cyclic Amino Acids", J. Med. Chem. 39:2270-2276, 1996.
	AK	Ruelle et al., "The Mobile Order Solubility Equation Applied to Polyfunctional Molecules: The Non-hydroxysteroids in Aqueous and Non Aqueous solvents", International Journal of Pharmaceutics 157:219-232, 1997.
	AL	Song et al., "Ubiquitous Receptor: A Receptor that Modulates Gene Activation by Retinoic Acid and Thyroid Hormone Receptors", Proc. Natl. Acad. Sci. 91:10809-10813, 1994.
	AM	Song et al., "Ubiquitous Receptor: Structures, Immunocytochemical Localization, and Modulation of Gene Activation by Receptors for Retinoic Acids and Thyroid Hormones", Annals of the New York Academy of Sciences 761:38-49, 1995.
	AN	Sweeny et al., "Metabolism of 5-fluorouracil to an N-cholyl-2-fluoro- $\beta$ -alanine conjugate: Previously Unrecognized Role for Bile Acids in Drug Conjugation", Proc. Natl. Acad. Sci. 84:5439-5443, 1987.

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	AO	Summerfield et al., "Identification of Bile Acids in the Serum and Urine in Cholestasis", Biochem. J. 154:507-516, 1976.
	AP	Varma et al., "Synthesis and C-25 Chirality of 26-Hydroxycholesterols", The Journal of Organic Chemistry 40:3680-3686, 1975.
	AQ	Wei et al., "Modulation of Hormone-dependent Glucocorticoid Receptor Function Using a Tetracycline-regulated Expression System", J. Steroid Biochem. Molec. Biol. 64:1-12, 1998.
	AR	Xia et al., "Synthesis of N-Substituted 3-OXO-17 $\beta$ -Carboxamide-4-AZA-5 $\alpha$ -Androstanes and the Tautomerism of 3-OXO-4-AZA-5-Androstenes", Heterocycles 47:703-716, 1998.

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